

Date: Wednesday, 2/15/2006 3:46:39 PM
 User: Kim Johnston

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services Drawing Name : WEARSHOE
 Job Number : 25841
 Estimate Number : 10330
 P.O. Number : N/A
 This Issue : 2/15/2006 S.O. No. : N/A
 Prsht Rev. : NC
 First Issue : N/A Type : PURCHASED PARTS
 Previous Run : 24149
 Part Number : D2746
 Drawing Number : D2746 REV B *see attached email from Peter*
 Project Number : N/A
 Drawing Revision : B
 Material : N/A
 Due Date : 3/3/2006 Qty: 50 Um: Each
 Written By : *SEE COMMENT BELOW*
 Checked & Approved By : *06.02.16*
 Comment : Est: D 02.10.24 Re-format KJ

Additional Product

Job Number:



Seq. #: Machine Or Operation: Description :

1.0

PG

PURCHASING



Comment: PURCHASING

Issue P/O: *603*

Email or ship DXF file to vendor

Laser Cut per Dwg D2746 flat pattern D2746.

Material release note required

u 06.02.16 50

2.0

D2746F

Wearshoe



Comment: Qty.: 1.0000 Each(s)/Unit Total: 50.0000 Each(s)
 WEAR PLATE

3.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Receive & Inspect For Transit Damage

Ensure material release note is attached

C 206/03/09 50

4.0

QC6

DIMENSIONAL CHECK



Comment: DIMENSIONAL CHECK

Inspect dimensions per template D2746T1

06.03.15

5.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

Deburr if necessary.

N/A 50 06/03/16 50

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: DP Date: 06/03/21
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 2/15/2006 3:46:39 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: WEARSHOE

Job Number: 25841

Part Number: D2746

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

BRAKE NC

NC BRAKE



Comment: NC BRAKE

1-Form on CNC Brake as per Dwg D2746 using Jigs DT8261 and DT8326

2-Form joggle on Punch as per Dwg D2746 using Jig DT8158 Identify as D2746

SB 06/03/16 (50)

7.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

06-03-16 (50)

8.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat Grey Sandtex (Ref: 4.3.5.6) as per QSI 005 4.3

DL 06/03/20 (50)

9.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

MA 06 03 21 (50)

10.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: F.P.

MA 06 03 21 (50)

11.0

DC

DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Inspection Level 21

DD 06/03/21 (50)

Job Completion



U 06.03.21

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

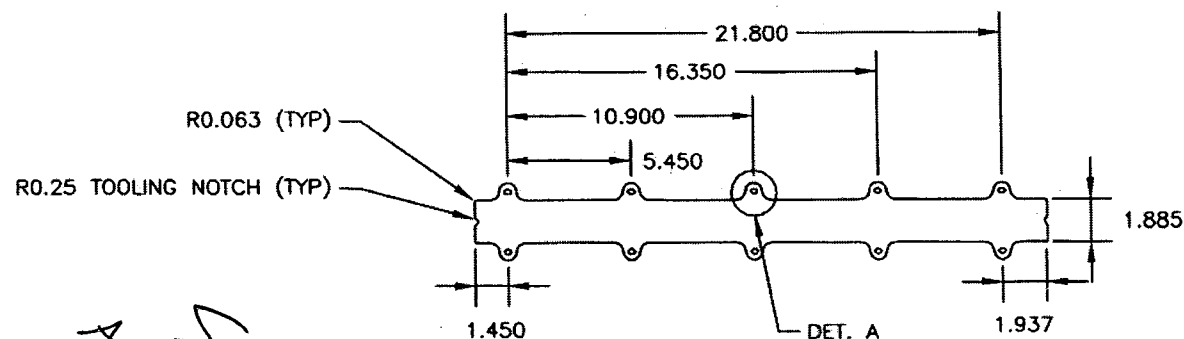
NOTE: Date & initial all entries



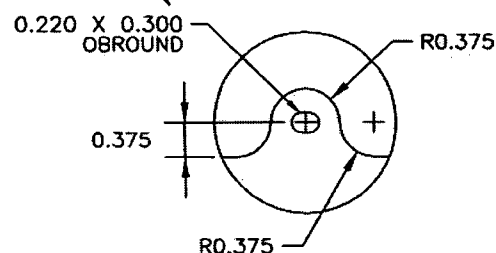
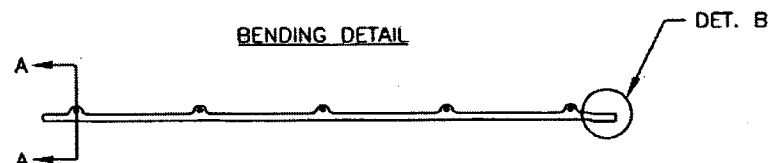
RELEASED
98-11-03 DS

DESIGN	DRAWN BY	DART AEROSPACE USA, INC.
98-11-03	CP	FAIRCHILD INTERNATIONAL AIRPORT, WA
CHECKED	APPROVED	DRAWING NO.
98-11-03	KE	D2746
DATE	TITLE	SHEET 1 OF 1
98.08.18	WEARSHOE	SCALE 1:8
A	98.04.16	NEW ISSUE
B	98.08.18	RE-DESIGN

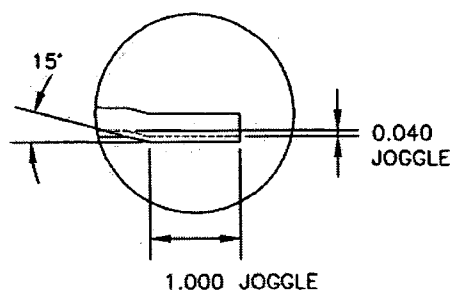
FLAT PATTERN



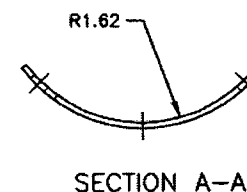
BENDING DETAIL



DETAIL A



DETAIL B



SECTION A-A

MATERIAL: AISI 1010-1025 OR ASTM A36/A366 SERIES STEEL
20 GAUGE (0.040 THICK)

FINISH: POWDER COAT GREY (REF. 4.3.5.5) PER DART QSI 005 4.3
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

NOTE: THIS PART CAN BE MADE BY MODIFYING D2656-21

Handwritten: All tooling
Back Rec'd

Handwritten: WORK ORDER
NO. 25841

UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE

Linda Lacelle

From: Jeff Mostat [jeff@industriallaser.com]
Sent: Thursday, March 02, 2006 1:09 PM
To: Linda Lacelle
Subject: Re: D2746 wearshoe under review

You got it,
I'll supply this revision...

Jeff Mostat
Production Mgr.

Industrial Laser Cutting

ph.(604) 946-4152 ext.224
fax(604) 946-4153

----- Original Message -----

From: "Linda Lacelle" <llacelle@dartaero.com>
To: "Jeff Mostat (E-mail)" <jeff@industriallaser.com>
Sent: Thursday, March 02, 2006 9:02 AM
Subject: FW: D2746 wearshoe under review

> new flat pattern

>

> -----Original Message-----

> From: Peter Hum [mailto:phum@dartaero.com]
> Sent: Thursday, March 02, 2006 11:50 AM
> To: 'Linda Lacelle'
> Subject: RE: D2746 wearshoe under review

>

>

>

>

> -----Original Message-----

> From: Linda Lacelle [mailto:llacelle@dartaero.com]
> Sent: Thursday, March 02, 2006 11:46 AM
> To: 'Peter Hum'
> Subject: RE: D2746 wearshoe under review

>

>

> yes pls

>

> -----Original Message-----

> From: Peter Hum [mailto:phum@dartaero.com]
> Sent: Thursday, March 02, 2006 11:37 AM
> To: 'Linda Lacelle'; 'Kim Johnston (E-mail)'; 'Jean-Luc Menard
> (E-mail)'; 'Eric Charbonneau (E-mail)'
> Subject: RE: D2746 wearshoe under review

>

>

> If you can cancel it, please do it

>

> The revision requires a new flat pattern

>

> I have the signed and released drawing of D2746, Rev C

>

> Do you want me to e-mail the new .dxf file to you Linda?

>

> Peter

>

> -----Original Message-----

> From: Linda Lacelle [mailto:llacelle@dartaero.com]

> Sent: Thursday, March 02, 2006 11:32 AM

> To: 'Peter Hum'; 'Kim Johnston (E-mail)'; 'Jean-Luc Menard (E-mail)';

> 'Eric Charbonneau (E-mail)'

> Subject: RE: D2746 wearshoe under review

>

>

> presently have 50 on order, should I cancel if it's not too late?

> LL

>

> -----Original Message-----

> From: Peter Hum [mailto:phum@dartaero.com]

> Sent: Thursday, March 02, 2006 11:19 AM

> To: Kim Johnston (E-mail); Jean-Luc Menard (E-mail); Eric Charbonneau
> (E-mail)

> Cc: Linda Lacelle (E-mail)

> Subject: D2746 wearshoe under review

>

>

> D2746 wearshoe DWG, REV B is under review.

>

> All current production and in stock is okay

>

> 1) Please place the estimate and drawings under review

> 2) Linda, please do not order any new D2746 REV B

>

> Thank you,

> Peter

>



New Zealand Steel Limited
Glenbrook, South Auckland
Postal: Private Bag 82121, Auckland, New Zealand
Telephones: (09) 375 8898 / 375 8111 Auckland
 (09) 235 8089 / 235 3535 Waiuku
Fax: (09) 375 8899

TEST CERTIFICATE

Ref: 5748/25194

Reissued 1/12/2005

CUSTOMER	Wilkinson	50916DI001										SPECIFICATION	ASTMA1088 CS Type A						CERTIFICATE No	TC122432				
CUSTOMER ON	98-21N-963										PRODUCT	CRA WIDE COIL						PAGE	1 of 1					
MILL ON	507666										DIMENSIONS	0.055" x 48" x Coil						DATE	29 November 2005					
PACK NUMBER	HEAT No	CHEMICAL COMPOSITION PERCENT														MECHANICAL TESTS (TEST SPECIFICATION - ASTM A370)								
		C	SI	Mn	P	S	Cu	Ni	Cr	Mo	V	Nb	Ti	Al	B	N2	CE ()	BEND	YIELD	T.S.	%ELONG	HARDNESS	r	LENGTH
		x100				x1000								x10000		x100	180°				G.L.=	HRB	()	(feet)
R9-470783-00	645502	6	1	20	14	21	11	17	21	2	6	1	1					Good				57		1532
R9-470784-00	645502	6	1	20	14	21	11	17	21	2	6	1	1					Good				57		1444
R9-470785-00	645530	6	1	20	11	21	12	17	22	2	5	1	1					Good				53		1558
R9-470786-00	645530	6	1	20	11	21	12	17	22	2	5	1	1					Good				53		1499
R9-470787-00	645530	6	1	20	11	21	12	17	22	2	5	1	1					Good				53		1558
R9-470788-00	645530	6	1	20	11	21	12	17	22	2	5	1	1					Good				53		1545
R9-470789-00	645502	6	1	20	14	21	11	17	21	2	6	1	1					Good				56		1558
R9-470790-00	645502	6	1	20	14	21	11	17	21	2	6	1	1					Good				56		1558
R9-470791-00	645701	5	TR	19	11	15	12	17	23	3	8	1	1					Good				50		1558
R9-470792-00	645701	5	TR	19	11	15	12	17	23	3	8	1	1					Good				50		1444
R9-470793-00	645701	5	TR	19	11	15	12	17	23	3	8	1	1					Good				53		1558
R9-470794-00	645701	5	TR	19	11	15	12	17	23	3	8	1	1					Good				53		1444
R9-471202-00	645502	6	1	20	14	21	11	17	21	2	6	1	1					Good				57		1631
R9-471203-00	645502	6	1	20	14	21	11	17	21	2	6	1	1					Good				57		1604
R9-471204-00	645502	6	1	20	14	21	11	17	21	2	6	1	1					Good				58		1604
R9-471205-00	645502	6	1	20	14	21	11	17	21	2	6	1	1					Good				58		1539

YIELD (A)=0.2% PROOF STRESS (B)=LOWER YIELD STRESS	GAUGE LENGTH (G.L.) (A)=200mm (C)=80mm (E)=2" (B)=50mm (D)=5.65 / So (F)=8"	PLASTIC STRAIN RATIO (r) (A)=0 (C)=r45 (B)=r90 (D)=(r0+r90+2r45) / 4	IMPACT TEST (A)=10mm x 10mm (B)=7.5mm x 10mm (C)=5mm x 5mm (D)=2.5mm x 10mm (E)=5mm x 10mm	CARBON EQUIVALENT VALUE (CE) (A)=C+Mn/6 (B)=C+Mn/6+(Cr+V+Mo)/5+(Cu+Ni)/15 (C)=C+Mn/6+Si/24 (D)=
----------------------------------------------------------	-----------------------------------------------------------------------------------	----------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------

WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN TESTED AND INSPECTED
WITH SATISFACTORY RESULTS IN ACCORDANCE WITH THE REQUIREMENTS OF THE ABOVE SPECIFICATION

APPROVED

Antish Misra
QC METALLURGIST

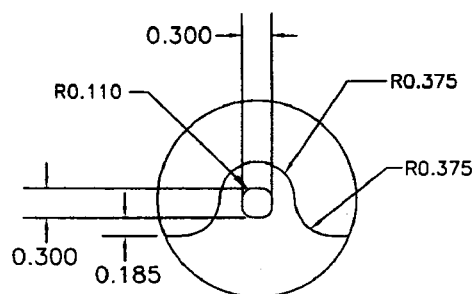
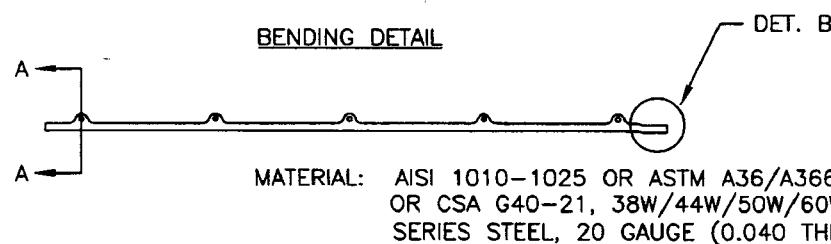
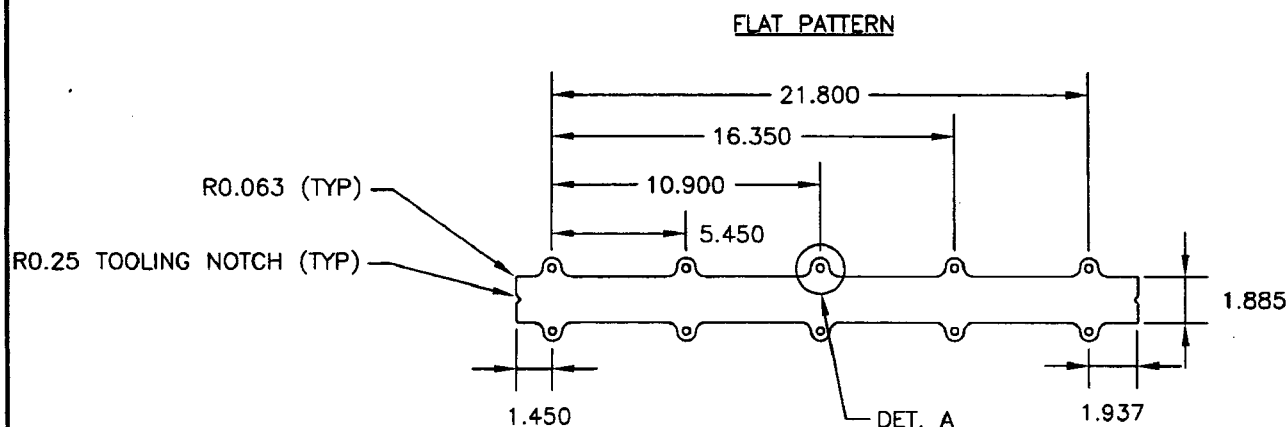
P/O 603



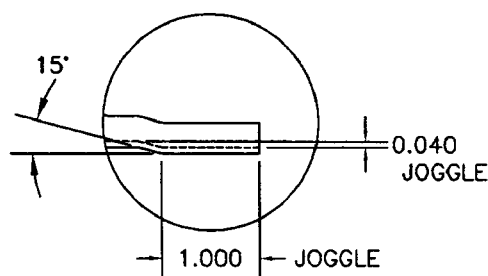
RELEASED
06-20-07

REFERENCE ONLY

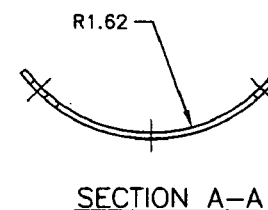
DESIGN	DRAWN BY	DART AEROSPACE USA, INC.
F41	F41	PORT HADLOCK, WA
CHECKED	APPROVED	DRAWING NO.
		D2746
DATE	TITLE	SCALE
06.01.12	WEARSHOE	1:8
A	98.04.16	NEW ISSUE
B	98.08.18	RE-DESIGN
C	06.01.12	ENLARGE HOLES TO IMPROVE FIT



DETAIL A



DETAIL B



NOTES

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21, 38W/44W/50W/60W/70W SERIES STEEL, 20 GAUGE (0.040 THICK)
- 2) FINISH: POWDER COAT GREY SANDTEX (REF. 4.3.5.6) PER DART QSI 005 4.3
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) THIS PART CAN BE MADE BY MODIFYING D2656-21